Than

	Application No.	Applicant(s)
Notice of Allowability	10/081,673	RAMANATHAN ET AL.
	Examiner	Art Unit
	Jungwon Chang	2154
The MAILING DATE of this communication apperation apperation allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	ars on the cover sheet w (OR REMAINS) CLOSED or other appropriate comm GHTS. This application is	n this application., If not included unication will be mailed in due course. <b>THIS</b>
1. This communication is responsive to interview dated 11/17.	<u>/2005</u> .	
2. The allowed claim(s) is/are 1-12.		
3. ☐ Acknowledgment is made of a claim for foreign priority un  a) ☐ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have	been received.	
<ul> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this national stage application from the</li> </ul>		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 ☐ Notice of L	nformal Patent Application (PTO-152)
<ol> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>	6. 🛛 Interview S	Summary (PTO-413),
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0		./Mail Date <u>11/17/2005</u> . s Amendment/Comment
Paper No./Mail Date	8. 🔲 Examiner's	s Statement of Reasons for Allowance
of Biological Material	9.	
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## **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William J. Kramer, Reg. No. 46,229 on 11/17/2005.

- 2. The following title is suggested: --- An opportunistic directory cache and method of serving target directory information in a network environment ---.
- 3. The application has been amended as follows:

## In claims

1. (Currently Amended) A method of serving target directory information, in a computing environment comprising a server computer hosting the target directory, a client computer communicably linkable to the server computer, the client computer hosting an application and a directory cache, the method comprising the steps of:

receiving from the application a benign request for information relating to a target file potentially contained in the target directory;

inspecting the directory cache to determine whether a valid enumeration of

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the contents of the target directory is cached in the directory cache;

forwarding the request for information to the server if it is determined that a valid enumeration of the contents of the target directory is not cached in the directory cache;

inspecting the directory cache to determine whether a valid entry for the target file is contained in the enumeration of the contents of the target directory, if it is determined that a valid enumeration of the contents of the target directory is cached in the directory cache;

returning to the application an indication that the target file does not exist in the target directory if it is determined that a valid entry for the target file is not contained in the enumeration of the contents of the target directory; and

if it is determined that a valid entry for the target file is contained in the enumeration of the contents of the target directory, serving the request for information from the directory cache if the valid entry for the target file contains sufficient information to satisfy the request, and otherwise sending the request to the server and passing a response from the server to the application [[.]],

wherein the directory cache also contains partially valid and invalid enumeration of the contents of the target directory.

7. (Currently Amended) A method of managing a directory cache for a target directory, in a computing environment comprising a server computer hosting the target directory, a client computer communicably linkable to the server computer, the client computer hosting an application and the directory cache, the method comprising the steps of:

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receiving from the application a non-benign request for information relating to a target file potentially contained in the target directory;

inspecting the directory cache to determine whether a valid enumeration of the contents of the target directory is cached in the directory cache;

forwarding the request for information to the server if it is determined that a valid enumeration of the contents of the target directory is not cached in the directory cache, and caching a server response to the request for information in the directory cache;

inspecting the directory cache to determine whether a valid entry for the target file is contained in the enumeration of the contents of the target directory, if it is determined that a valid enumeration of the contents of the target directory is cached in the directory cache;

invalidating in the directory cache the file information for all entries that begin with the same first character as the target file if it is determined that a valid entry for the target file is not contained in the enumeration of the content of the target directory; and

invalidating in the directory cache the file information for the target file if it is determined that a valid entry for the target file is contained in the enumeration of the content of the target directory [[.]].

wherein the directory cache also contains partially valid and invalid enumeration of the contents of the target directory.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is 571-272-

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3960. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jungwon Chang December 9, 2005

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